

IN THE US PATENT AND TRADEMARK OFFICE

Application Number: 10/698,988
Agent's Docket Number: NSL-014
Filing Date: October 31, 2003
Applicant: Brian M. Sager et al.
Application Title: INORGANIC/ORGANIC HYBRID NANOLAMINATE BARRIER FILM
Examiner: Marc A. Patterson
Art Unit: 1772

Affidavit under 37 C.F.R. 1.132

I, Michael D. McGehee, being duly sworn, depose and say that

1. I am an Associate Professor in the Department of Materials Science and Engineering at Stanford University.
2. I have an undergraduate degree from Princeton University. I have a doctorate from the University of California, Santa Barbara.
3. I am the head of a Stanford research group studying organic semiconductors, nanostructures and solar cells.
4. As one skilled in the art, I have reviewed the Brinker patent (US Patent 6,264,741 to Brinker et al.) and believe that the currently claimed invention using superhydrophobic material in the self assembled structure shows a surprising result. The self assembly process is based on a careful balance of hydrophilic and hydrophobic material, in order to cause the surfactant concentration to exceed the critical micelle concentration, resulting in micelle formation. The introduction of superhydrophobic material will disrupt the delicate balance of materials. As an initial matter, it is non-obvious that self-assembly can occur using a superhydrophobic material. Thus, to have a self-assembled structure formed using a superhydrophobic material is a surprising result. Furthermore, it is non-obvious what ratio of superhydrophobic material will still allow such self-assembly to occur.

Signature: Michael D. McGehee
Michael D. McGehee

Date: 2/13/08

State of California)
County of Santa Clara) ss.

On this 13th day of February, in the year 2008, before me, Petra Gajar, Notary Public, personally appeared Michael D. McGehee, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature

Petra Gajar

(SEAL)

